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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,269	10/31/2003	William Gerald Wyatt	004578.1384	1666
45507	7590	06/06/2006	EXAMINER	
BAKER BOTTS LLP 2001 ROSS AVENUE 6TH FLOOR DALLAS, TX 75201			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/698,269

Applicant(s)

WYATT ET AL.

Examiner

John K. Ford

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/3/06
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/2/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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Applicant's election of Group I (claims 1-9) and the first species of Figures 1 and 2 (with claims 1-8 of Group I being deemed readable by applicant on the elected species of Figures 1 and 2), without traverse, in the April 3, 2006 communication, is acknowledged. Accordingly, claims 9-19 are withdrawn from consideration here.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

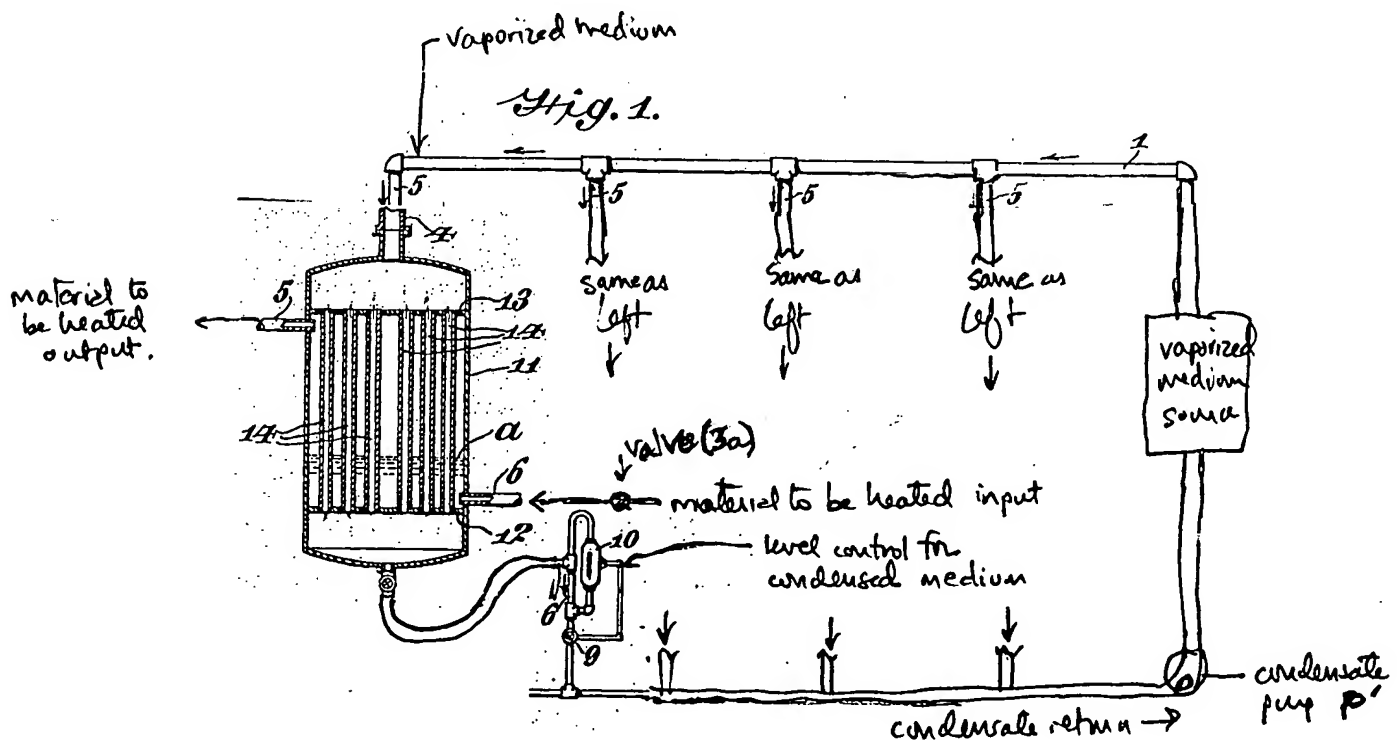
It is not understood, particularly in regards to claims 2 and 3, which disclosed "further conduit" is being claimed in claims 2 and 3. Are these conduits 93 and 94 or are they a claim to a further module as shown in Figure 2 at 21 and 22? The nature of the "predetermined direction" (claim 1) and the "approximately perpendicular to said predetermined direction" (claim 2) and "further direction" (claim 4) is particular unclear because no particular "direction" relative to some identifiable heat exchange structure is specified. Without some reference direction these directions could be in any arbitrary direction. Please specify these directions relative to the rest of the claimed structure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roultou (USP 1,906,422) in view of Fay (USP 5,950,717).

Note at the on-set, that Roultou discloses, but does not show the variant discussed on page 3, lines 84-86, wherein "the heating medium may be passed through the tubes and the fluid to be heated passed around the tubes, instead of as described above." It is this latter, un-illustrated embodiment of Roultou, which the examiner relies on in the rejections that follow. For convenience, the Examiner has drawn it below, showing only one unit 11 in detail, with the understanding that this one unit 11 is repeated a total of four times in drawing.



The claimed first and second portions of claim 1 are the upper and lower portions of shells 11. Thermally conductive portions (comprising the space defined by the tubes 14 in respective shells 11) are disposed between the upper and lower portions of the shells 11. A supply section 1 transports vapor to a plurality of pipes 5 that distribute the vapor to the upper (first) portion of the various shells 11. While no fins (applicant's claimed "thermally conductive portion") are shown in Roulton, such fins are disclosed by Fay in Figure 3 and are submitted to be ubiquitous in this art and therefore, if not already present, would have been obvious to have added to improve heat transfer. The first and second valves are any two respective valves 9 connected to the outlet of any respective shells 11.

The valves are responsive to the presence of coolant in a liquid state as determined by a respective liquid level device 10 (of the four disclosed), which opens a respective valve 9 (of the four disclosed) to drain the respective condensate from the respective lower portion.

Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Larinoff (USP 4,129,180), Fay (USP 5,950,717) and Roulton (USP 1,906,422).

Larinoff teaches a vapor condenser with two tube banks 24 that each condense vapor and control the condensate level in the wells 29 (sometimes called "pots" in this

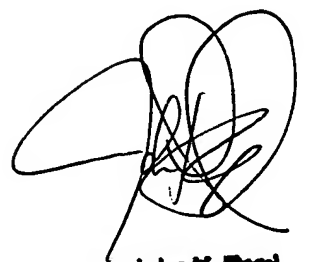
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particular art). Overflow drainpipes 31 without the use of a valve control the level. Fay discloses in Figure 3, that the tubes in the tube banks of Larinoff are typically finned to increase the air-side heat transfer. To have finned the tubes of Larinoff would have been obvious to one of ordinary skill to advantageously increase heat transfer.

Moreover (regarding applicant's claims 2 and 3) to have connected as many units 24 of Larinoff as required in the manner shown by Fay in Figure 1 (section G1, G2 and G3, for example) would have been obvious, to have met the cooling requirements for whatever size power plant need to be cooled. Each section would have its own condensate drain. The discussion of Roulton given above is incorporated here by reference. To have replaced overflow drainpipes 31 of Larinoff with a level control as taught by Roulton at 6, 9 and 10 (i.e. an automatic controlled drain valve) to advantageously eliminate the need for a condenser pot vent discussed in the paragraph spanning columns 6-7 of Larinoff would have been obvious to one of ordinary skill in the art.

Claim 7 is considered to be provisionally allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims, however the 35 USC 112, second paragraph, problems noted above are making it very difficult to ascertain precisely what is being claimed and the examiner reserves final judgment as to the allowability of this claim until after it is written to make it clear precisely what is claimed.

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.



**John K. Ford**  
**Primary Examiner**